

Global Trends of Population Dynamics Oncoming 2050

Amrita Paul and Prithvish Nag

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Abstract

The study of population dynamics has evolved into a significant industry. Various organisations, agencies, universities, and individuals across sectors are increasingly involved in monitoring, forecasting, and planning around population trends. The 2020 World Population Data Sheet, a crucial resource in this field, projects a global population increase from 7.8 billion in 2020 to 9.9 billion by 2050. This reliable source also indicates a shift towards an ageing population worldwide, particularly in Europe. Other notable trends include a declining fertility rate, increased mortality rate (notably due to COVID-19 since late 2019), higher life expectancy, reduced immigration rates, changes in marriage patterns, and shifts in population distribution at regional, national, and international levels. These factors, along with women's empowerment and changes in the global economic order, are expected to significantly shape the mindset and lifestyle of future generations by 2050. This can be referred to as our demographic destiny.

Our planet is grappling with many consequences stemming from population dynamics, such as the greying of populations or the ageing of nations. No country is immune to this transformation. In many parts of the world, women, particularly those in the workforce, opt for smaller families and greater financial stability. Men live longer lives due to advancements in agriculture, industry, technology, healthcare, and media. Countries like Japan and China, where the proportion of elderly citizens is rapidly increasing, will be disproportionately affected by these population shifts. These changes bring about new government responsibilities and fundamentally alter various aspects of social life, such as family structures, labour force participation, and cultural norms. While a smaller population may resolve endemic issues in many countries, it can also pose new challenges for larger countries if the composition of the population needs to be adjusted.

Keywords: greying population, depopulation, replacement level fertility, population stabilisation, normalised population decline, population projection, demographic destiny

Introduction

The volume and quality of population is an asset. We all can admit that a country's greatest wealth is its 'people', as human capital is even more important than physical capital

for increased production. Therefore, the study of population has become an industry. Universities, institutions, banks, insurance houses, disaster management agencies,

international funding organisations, foreign and defence establishments, groups of companies, and the like have been involved in population studies as a part of their larger strategies and goals. Disciplines like sociology, economics, political science, regional science, and demography have been directly interested in monitoring and forecasting different aspects of the population. As a result, population studies have become a multi-disciplinary thrust area. Keeping all these in mind, John I. Clarke (1997) rightly mentioned the future of population. Following the very relevant statement of Knowles & Wareing, population projection or population forecasting is the most important component for a nation's planning purposes. It shows how the human population statistics might change if the current composition continues. It forms a framework for a great deal of the subsequent work in devising, testing, evaluating and implementing the plans.

2000 is no more likely than any other year to be a significant threshold for population change, seen within the continuity of time. However, for many people, it has been a target for living, working, and forecasting, a focus for opportunities for change and a launch-pad for the future, so its significance must not be ruled out (Clarke, 2000). Predictions regarding population are generally more difficult than those of physical systems as the human system hardly follows laws and tends to transform very fast. Nevertheless, futurology

must move forward for the planned growth of a nation, but one should be serious and cautious about the fogginess of the future. So, it has been recognised as *an impossible but unavoidable task*.

The *2020 World Population Data Sheet* indicates that the world population will increase from 7.8 billion in 2020 to 9.9 billion by 2050. This level represents an increase of more than 25 per cent from 2020. The global total fertility rate is 2.3 births per woman, although 91 countries and territories have registered fertility rates below replacement level (2.1 births per woman). In contrast to this high population growth and the related issues, the growth trend is approaching a growing population worldwide, especially in Europe. Moreover, lowering fertility rate, higher mortality rate due to particularly Covid 19 (since late 2019), ageing population, higher life expectancy, lower rate of immigration, new trend of Marriage pattern, redistribution and regrouping of population at regional, national and international levels, upliftment of women status and emerging world economic order, above all the very remarkably depopulation and shrinking nations are going to transform the future generations' mindset and life within 2050.

Population Trends in Recent Times

It was November 24 2022, when India's government declared that the

country's fertility rate had dropped below the replacement rate (2.0 children per woman), which indicates an insufficiency of new births to cope with a steady population structure for the future, similar to many the richer nations (Brazil, Russia, China) are going to face. It is no surprise that planners and demographers are now explaining this falling fertility scenario as a 'demographic contagion'. It has been pointed out that more babies were born in India in 2003 than any year before and after. Since then, the number of live births has been falling consistently yearly. The country witnessed another milestone in 2005. The fertility rate fell below three that year. By 2019, that rate had slipped to 2 – well below the world average. Roughly seven lakh fewer babies would have been born in 2021 than in 2003, *i.e.* about 1,900 fewer kids born every day.

"All these indicators point in the same direction – Indian family size is shrinking faster than most think. It took only 14 years for the fertility rate to fall by 50 per cent (from 3 to 2) in India, whereas in Bangladesh – globally acclaimed for birth control – a similar fall took 17 years." (Website1*) This impasse is dominated by an outdated but continuing concept of population control and a rights-based agenda. Similar to China, India has been an example of draconian population control policies. There are plenty of cases, like Iran, that made contraceptives available to its public health services to reduce its population growth rate successfully. Bangladesh has been investing in community outreach services and the empowerment of women. Saudi Arabia permitted women to access

contraception in the private sector without foisting any state policy. Families across the globe enable themselves to pursue their wishes and fundamental rights. The country director of the Indian Population Council has rightly mentioned that the recent *new population narrative asks that the state should not be the controller but the enabler* (<https://www.dawn.com>, Website2*).

US Census Bureau's *Population Projections 2017* has mentioned that the decade 2030 will be marked as a '*Transformative Decade*' and will emerge as a decade of important demographic momentum due to the heavily declining fertility rate. The US grew at a rate of 0.2 per cent from January 1, 2021, to 2022, while the world is growing at a rate of 0.9 per cent simultaneously. It is worth mentioning that this global growth rate is lower than the 0.96 per cent forecast, coming against the backdrop of the Covid pandemic. By 2030, the population will be older and fall into the +60 age group, which will expand the volume of the aged population. Here, similar terms such as '*greying of population*' or '*aging of nation*' have been used to address this issue.

News that the US population barely grew in 2021, together with ever-falling birth rates and the decline in immigration, raises the possibility that the nation will be shrinking. People tend not to want to live in shrinking places. If the US population starts to decline, it might lead to even less housing demand in stagnant metro areas and an even worse housing affordability crisis in

the smaller number of places that continue to attract new residents.

No country is immune to the consequences of this ageing demographic trend. Countries like Japan and China will be particularly affected by the ageing process since the latter has the highest proportion of elderly people compared to any other country. This demographic trend is altering people's lives, creating new responsibilities for the Japanese government, and transforming different aspects of social life. It is projected that in the future, ageing and slower growth rates

will characterise the populations of all major regions in the world.

Lower Fertility and Lowering of Population

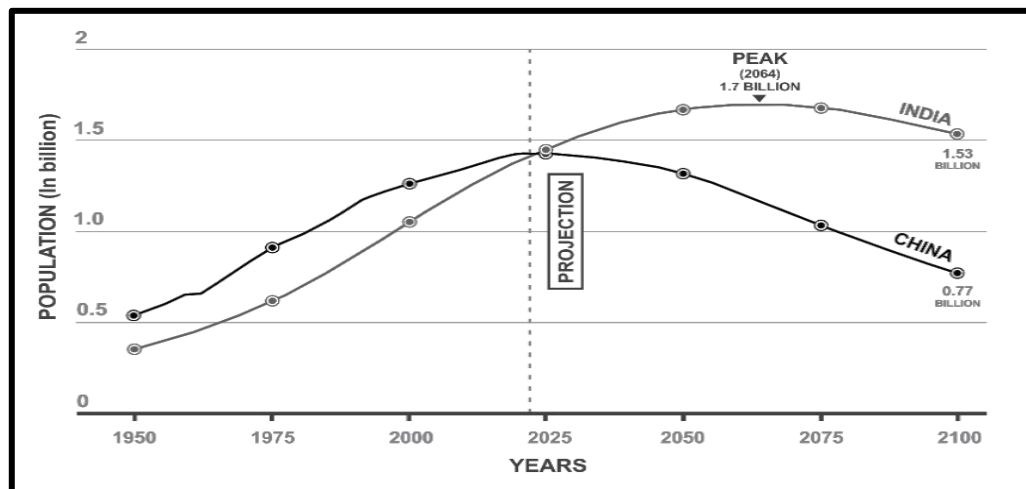
In the third week of January 2023, the Chinese government announced that the country has *entered an "era of negative population growth."* The last time China's population declined was in 1961, during a devastating four-year famine following a failed "*Great Leap Forward*" campaign.

"The shrinking of the world's most populous country by as much as 8,500,000 in 2022 marks a watershed moment with lasting consequences for China and the world. Beijing announced on January 17 that births in China last year dropped by more than 10% to 9.56 million, with 10.41 million deaths. The 1.411 billion population will certainly be overtaken by India's this year." (Website3*)

Recently, young women in urban China have not been keen to discuss the prospects of having children. "It costs too much to give kids a decent life. The stuff they teach at school is propaganda, so I would want to send them to an international school or abroad. However, I cannot afford that," said a 26-year-old researcher who swears she will not have children (The Guardian, Verna Yu, January 20, 2023, Website4*). The latest data from the National Bureau of Statistics reveals that Chinese mothers gave birth to 10.62 million babies in 2021, less than 12 million in 2020 (11.5 % down). The national birth rate also fell to 7.52 births for every 1,000 people, again down from 8.52 in 2020 and the lowest rate since data became available. Remarkably, China's population level could fluctuate around the point of growth stagnation in the coming years before it starts to decline, analysts say, in light of new data showing that the mainland's overall population will increase by just 480,000 people in 2021. Its population is expected to grow in 2022 before approaching zero growth and eventually entering a stage of normalised decline. "In the next 10 to 20 years, China's natural population growth will not continue falling; it will fluctuate around zero and could see small drops, but there will not be rapid decreases," remarked a professor with the Population

Figure 1

Future Population Scenario of China and India



Source: United Nations *The Guardian*, Verna Yu, January 20, 2023.

Development Studies Centre at Renmin

University. "The natural population increase was 2.04 million people in 2020 and 0.48 million in 2021," He further said that looking at the total national population of 1.4 billion people, we can say that the number of deaths offsets the number of births. Demographers have also supported the nation's three-child policy, which was rolled out last year, as it will be effective to

the extent of positively impacting population growth. Fig 1 shows how India will overtake China as the world's most populous country in 2023.

In recent years, the government has begun to offer incentives such as tax breaks, subsidies for childcare and longer parental leave while discouraging abortions. An academic even controversially suggested that social welfare and pensions should be

linked to the number of children people have. However, these measures have failed to trigger a baby boom.

Population growth is a function of fertility and life expectancy. Another large population is that of India. It had about 138 crore people in 2020. Two recent studies estimate the country's population to peak at 1.5 – 1.6 billion between 2040 and 2048. After that, a rapid decline will lead to an end-of-the-country population of a billion+ status. The lowest estimate by a *Lancet* study is roughly half of today's population (Website5*). Like almost the whole world, India is passing through an unprecedented demographic shift and transformation related to a fertility decline and dramatic

expansion of the aged population from numerical and proportional perspectives. The citizens are enjoying a prolonged life, an

increased life expectancy, a higher standard of living, and medical advancement. No doubt it is a positive sign. However, in the long run, if it is not planned, the increased population of people aged 60+ could imply a high fiscal burden for the government.

Following a survey by the Pew Research Centre using data from the Census and the National Family Health Survey (NFHS), reports on India's religious composition say that population growth rates have declined for all of India's major religious groups. Still, the slowdown has been more pronounced among religious minorities, which outpaced Hindus in earlier decades (Website6*). Besides fertility rate and migration, the religious composition of the population can also change because of conversion. While conversion has been a negligible reason, fertility and migration have been mainly responsible for the changing trends.

Since the end of the Second World War (1945), the Hungarian population has experienced a maximum fertility decline in 2021. However, the country is hopeful that 2022 will show a more positive picture in this context. The proportion of the young population in Germany has fallen to an all-time low (since 1950), both proportionally and in absolute terms and has long been coping with a rapidly ageing population, according to the figures from the Federal Statistical Office.

Further, in another European country, there are currently 5.47 million people living in Scotland. According to research by National Records of Scotland (NRS) based on data from the Office for National Statistics (ONS), its population looks likely to fall (5.39 million by 2045) after reaching a peak (slightly to 5.48m) in 2028.

Further, Croatia is an area that has experienced 10 per cent fewer people living within its territory than a decade ago, according to preliminary results of a census released on January 14 2022. The count lists the European Union country had 3.8 million in 2021, compared with 4.2 million in 2011, said Lidija Brkovic from the national statistics office (Euronews, 14/1/2022, Website7*). He also mentioned, "In the last ten years, the number of residents decreased by 396,000 people". For Croatia, this shortage of population reflects the *depopulation* problem.

South Korea's total population is expected to record its first decline in 2021. According to its statistics agency, it is a grim assessment of its demographic situations amid the country's chronically low birth rate, rapid ageing and a decline in incoming foreigners during the pandemic. The latest medium variant projection by Statistics Korea estimates that the total population has been estimated to have peaked at 51.84 million in 2020 before falling to an estimated 51.75 million (2021) and an estimated 37.7 million in 2070.

The country's total fertility rate – the average number of children a woman bears in her lifetime – hit a record low of 0.84 last year, much lower than the replacement level of 2.1 that would keep South Korea's population stable at 52 million.

The fertility rate and the number of new-borns are forecast to further decline over the next three and four years, which is feared to aggravate a major drop in the working-age population, a phenomenon known as a *demographic cliff*. If this trend continues, the working-age population will reach 17.37 million in 2070, 46.1 per cent. Policymakers warned the country that it may face an "age quake" starting in 2030-40, an earthquake-like demographic shock from a fall in population, and rapid ageing if it does not promptly tackle the issue.

"Many young people are delaying or giving up on getting married or having babies due to economic difficulties and changes in social norms. The number of those getting married sharply fell due to the COVID-19 pandemic." (Business Standard, 20th July, 2023, Website8)*

In 2014, Japan's population was estimated at 127 million, expected to shrink to 107 million, with a wholesome 16 per cent population decline by 2040. Furthermore, the population will squeeze 24 per cent by 2050 (97 million). If the demographic trend continues, this island country will face a total population decline of 50 per cent or more by 2100. Further, by 2030, all the children will be older and fall into

the +60 age group, expanding the volume of the aged population so that 1 in every 5 Americans will be in the retirement age. This indicates that 20 per cent of the total population exceeds the defined margin of 7 per cent by the United Nations. Strikingly, by 2035, there will be 76.7 million under 18 people, with 78 million above 65 population.

The population growth of the United States dipped to its lowest in the past year since its founding, according to figures released on January 12 2022. The decline in the US birth rate has continued for a long time. The year 2020 saw the fewest babies born relative to the population of women between 15 and 44 of any year in American history. A recent *Pew Poll* found the fraction of non-parents between 18 and 49 saying they were "very likely" to have kids fell from 32 per cent in 2018 to 26 per cent in 2021, while the fraction saying they were "not too likely" or "not at all likely" increased from 37 per cent to 44 per cent. The narrative of having a higher birth rate for teen pregnancy and immigration from other countries in the US is now ending. Teen pregnancy has been falling steadily for decades, and immigrants are also declining. Not only for the US, it is important to note that fertility has fallen across the world, even in countries with ultra-generous welfare states for parents.

The US Census Bureau said in its report that the country's population grew by only 0.1 per cent, with an additional 3,92,665 overall numbers.

The estimate suggests that the nation's population increased from 331,449,281 to 331,893,745, a gain of 0.13 per cent since April 1, 2020, the Census Day. This decline in growth rate can be attributed to decreased net international migration, reduced fertility, and increased mortality due in part to the Covid-19 pandemic. With the impact of this pandemic, this combination has resulted in a historically slow pace of growth in the US and all over the globe.

“Between 2020 and 2021, 33 states saw population increases and 17 states and the District of Columbia lost population, 11 of which had losses of over 10,000 people. This is a historically large number of states to lose population in a year,” the Census Bureau said in a release. (United States Census Bureau, 21st Dec, 2021, Website⁹*)

According to Australia's federal government's latest population statement, in 2020-21, the fertility rate was 1.66 babies per woman, similar to the rate recorded in 2018-19. In 2019-20, the rate had fallen to 1.61 babies per woman. The temporary decline in births was most evident in the December 2020 quarter, when births fell by 3,000 to reach 71,000 births, the lowest quarterly result in 15 years, the report says. The report forecasted that births for 2021-22 will also be 1.66 babies per woman, but that is expected to decline to 1.65 by 2024-25 and 1.62 by 2030-31, reflecting a long-term trend toward having fewer children and having children later in life. The excerpt released by the government on New Year's Day

shows Australia's median age is projected to increase from 38.2 years in 2020-21 to 42.8 years by 2060-61 (Lisa Cox, *The Guardian*, January 1 2023, *Website10**). Current scenarios indicate that ageing will continue to present a demographic challenge for Australia, with declining fertility rates and increasing life expectancies.

It is the reality that a smaller population will solve many of India's or other developing countries' endemic problems. Still, it can create new ones, too, if the composition of the population needs to be corrected. Compared to other countries with the same fertility, India's infant mortality rate is higher, and life expectancy is lower. That means the coming fall in population could turn into a collapse; India is also home to the highest number of underweight and stunted children. The peak of our demographic dividend is already behind us. The share of 15-34-year-olds in the population has been slowly sliding after peaking in 2011. This implies that the share of the dependent population (both young and old) will rise gradually. The prospect of India ageing before prospering to the levels of Western countries is real. It is this fear that has caused China to abandon its draconian single-child policy and encourage its youth to have more kids. It is claimed that considering its productivity, China is better placed than India.

Nevertheless, the projected collapse in China's productive population will hobble its economic

future. The country's imminent rise to the world's largest economy will last up to 10-15 years, after which the US will re-emerge at the top. The US's relative immigration friendliness and multiculturalism will help it replenish its productive population despite a low fertility rate (*Website11**). Hence, immigration and multiculturalism have important roles in economic revival as well.

Fear is that no U-turn can be formed in this context. It is not that people can be forced or incentives can be given to have more kids. If people are unwilling to get children internally, there is no external force to make them compelled to have more children. The experience of that 20+ countries that are shedding population is the proof. Though China adopted a two-child policy in 2014 and a three-child policy in 2021, the nation has yet to succeed in reversing the population policy. The reasons driving people to go for smaller or no families, such as the parents for one or a maximum of two children, remain the same in the face of policy persuasion.

Greying Population: Scenario Across the World

The term '*greying*' of a population refers to the fact that the population is steadily becoming more dominated by older people, whereby the young (aged under 15) have declined from 40 to 50 per cent of the total population to less than 20 per cent. In recent years, total fertility rates have declined abnormally and unexpectedly to 1.2 to 1.3 children per

woman in many European countries like Italy, Spain, Greece, etc. Sweden is a country where the ratio between the younger and older populations is 1:1, with average longevity rising towards eighty to eighty-five years. In other words, the median age of the population is going up. According to the Pew Research Centre survey:

“At a time when the global population of people ages 65 and older is expected to triple to 1.5 billion by mid-century, public opinion on whether the growing number of older people is a problem varies dramatically around the world.” (*Website12**).

The coronavirus pandemic has been hammering the normal local population growth since 2020, resulting in the smallest increase in a decade of just 0.3 per cent, according to the latest official figures of the National Statistics Office. Data revealed that the European Union had the biggest drop in annual population growth and a significant increase in the local mortality rate of people over 75. The added population decline on the existing shrinking number of people, the lower figure of total fertility, the increasing number of aged populations, and their prolonged life are giving rise to such a serious future problem that the demographic issue of the growing population will turn into the economic one.

Population ageing can have multidimensional and long-term consequences on a country's existing and upcoming population. Globally, the young population (below 20

years) accounts for 33 per cent as of 2020, which was 44 per cent around the 1950s. United Nations datasheet shows the up-jumping of the median age of 24 to 31 in 1950 to 30 to 38 as in 2020 in the world context. Table 1 depicts the global population share by number and percentage according to age group in 2020. Europe has the largest old population, followed by the US, where almost 25 per cent of the total population is in the age category of 60 years and above, largely due to a steeply declining birth rate and increasing life expectancy. In 2020, remarkably, around 147 million (1.9%) and 0.6 million (0.01%) population are in the age group of 80-99 years and 100+ years, respectively, which are sizably higher than just 70 years ago. In 1950, 80-99 years, the population share was very small, like 0.05 per cent.

Japan, China, South Korea, and many other European countries are expected to have more people dependent on shrinking workforces, a potentially significant demographic challenge for national economic growth. The top ten countries currently carrying the largest share of

the population of the 60+ age group are mostly from European Nations like Italy (23%), Portugal (22.3%), Germany (21.5%), Greece (21.9%), Bulgaria (21.2%), Croatia (20.8%), Malta (20.8%) etc. Japan is the world's oldest country, where people of the 65+ age group cover (28%) more than a quarter of the total population.

Throughout the demographic history, high fertility rates along with high mortality rates have been very typical and common. However, today, things are getting transformed. In most parts of the world, women, especially working women, are willing to have one or fewer children and earn more money. Men live prolonged lives mostly due to the agricultural-industrial-technical-medical-healthcare revolution. On average, a person lives for 72.6 years, and the birth rate has fallen to 2.5 children per woman. All these demographic trends and patterns have altered the demographic and socioeconomic scenario and will cause the *population to grey* for future individual perspectives for nations.

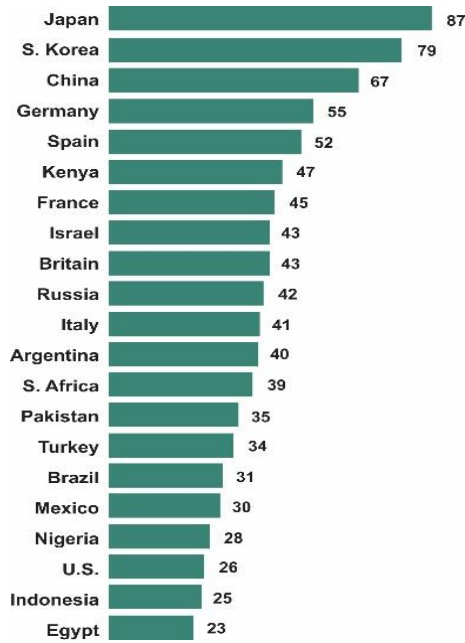
Table 1
Age-wise Population Share, World, 2020

Age group in years	Number of persons (2020) in billion	% of the global population
Less than 20	2.6	33.2
20-39	2.3	29.9
40-59	1.8	23.1
60-79	0.918	11.8
80-99	0.147	1.9
100+	0.0006	0.01

Source: Pew Research Centre

Figure 2

Percentage of Saying 'The Growing Number of Older People is a Major Problem.'

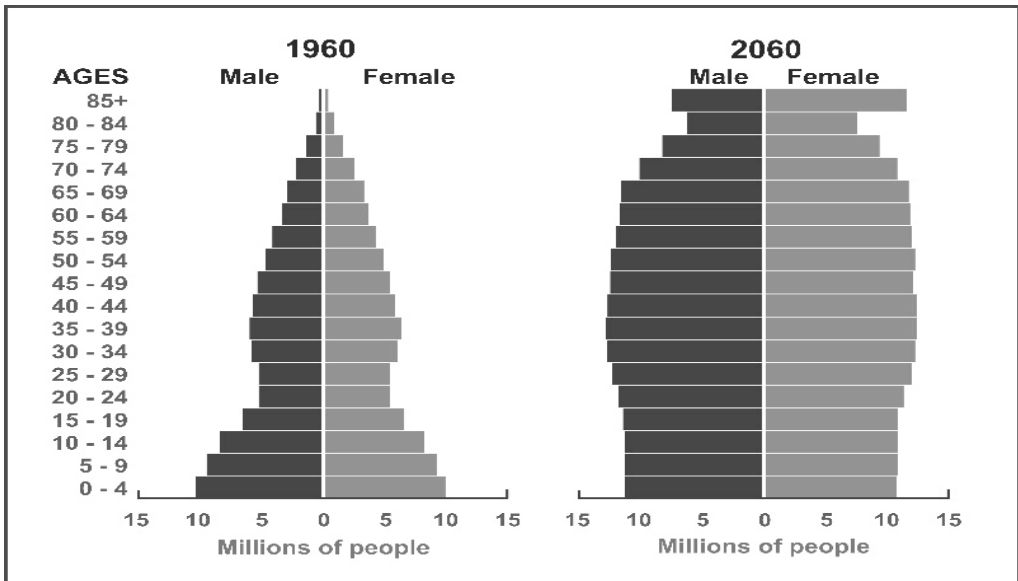


Note: The question asked was, "How much of a problem, if at all, is the growing number of older people in (survey country) ..." Responses of "Minor problem," "Not a problem," and "Do not know/Refused" are not shown.

Source: 2013 Pew Research Centre Global Attitudes Project survey.

Figure 3

Changing Pattern of Age-Sex Pyramid, US (1960-2060)



Source: Pew Research Centre

Data produced by the Pew Research Centre Global Attitudes Project survey declares that East Asian countries, like Japan and Korea, describe ageing as a major problem for their nations. Europeans also show a relatively higher concern about the greying population (Fig 2). However, Americans are least concerned, as only one-fourth of the population has expressed negative opinions regarding ageing. For the United States, the ageing population may lead to greater opportunities in the future global economy. Nevertheless, in countries outside East Asia and Europe, such as Indonesia and Egypt, the proportion of 60+-year-old people in the total population is relatively moderate and is expected to remain moderate. On the other hand, currently, Pakistan and Nigeria have a huge share of the child population and have been growing to be a part of the working population in the future. Thus, they stand to benefit from future demographic patterns.

China's once-a-decade census released in 2021 revealed that some 12 million babies were born in the previous year, the lowest fertility rate decline since the Great Famine occurred in 1961. Though the country has started allowing parents to have a second child since 2016, instead of obeying the one-child-population policy, according to the *National Bureau of Statistics*, the fertility rate in 2020 was 1.3 children per woman, failing to reverse China's falling birth rate.

"China is at risk of growing old before it grows rich, becoming a greying society with degrading economic fundamentals that impede growth. Excess of 10 million deaths a year could become the norm for China as its ageing crisis worsens." (Website13*)

In the case of India, according to the National Statistical Office (NSO)'s *Elderly in India 2021 Report*, under the Ministry of Statistics and Programme Implementation (MOSPI), the elderly population (aged 60 and above) is projected to rise 41 per cent over the next decade which will be expected to outnumber children under age 10. It will touch 194 million people by 2031, from 138 million in 2021, indicating stress and folds on our foreheads. The decline in birth in India is another controlling factor for the growing population.

Following the *US Census Bureau's Population Projections 2017*, by 2030, all children will be older and fall into the +60 age group, expanding the volume of the aged population so that 1 in every 5 Americans will be of retirement age (Fig 3).

The ageing population issue has long been on the agenda in Germany - a country facing uncomfortable questions about the sustainability of its pay as one looks into the pension system and the rest of the social security system with fewer people working to support the older generation. Most recently, the federal government opted to increase the contributions to long-term care insurance for people without children because childless individuals have a

lower financial burden and will ultimately require more support from the state in old age, without any offspring to care for them.

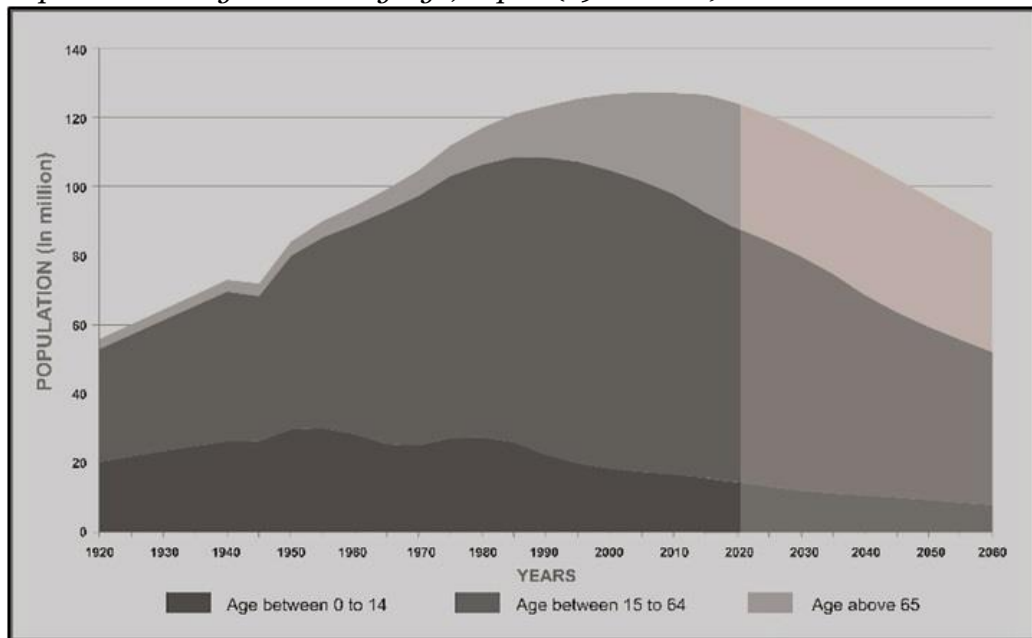
Japan is expected to have more people dependent on shrinking workforces, a potentially significant demographic challenge for economic growth. In 2014, Japan's population was estimated at 127 million, expected to shrink to 107 million, with a healthy 16 per cent population decline by 2040. Furthermore, the population will be squeezed by 24 per cent by 2050 (97 million). If the demographic trend continues, this island country will face a total

population decline of 50 per cent or more by 2100.

Statistics show that Japan's population started to decline in 2011. The decline in Japan's fertility rate has been attributed to several factors like changing lifestyles, late marriage or people not marrying at all, and the economic insecurity of the younger generation. According to former Japanese Prime Minister Shinzo Abe, "the existing elderly should continue working and participate in community activities, predicting the government plan to raise the optional age for retirement to 71 or older". Fig 4 depicts an overall scenario of ageing in Japan.

Figure 4

Population Categorisation by Age, Japan (1920-2060)



Source: Wikipedia

South Korea became an aged society in 2017, in which the percentage of those aged 65 or older

exceeded 14 per cent. The country is widely expected to become a super-aged society in 2025 when the

percentage of the elderly will be in the top 20 per cent. Last year, every 100 working-age people had to support 39 people younger than 15 or over 65, and the number will likely triple to 117 in 2070. The figure was the lowest among the 38 member countries of the Organization for Economic Cooperation and Development (OECD) last year. However, it will be the highest among the OECD member states in 2070.

Both old and young people face a unique set of challenges and opportunities. Therefore, if we ignore the growing population for now, the ageing population can also have constructive impacts on society. More people are enjoying longer, healthier lives, and a younger generation is making the responsible ecological choice to have smaller families, which is to be celebrated. In today's world, it is said that one of the most effective ways we can help our planet is by choosing to have a smaller family.

"Having one child means that there is time for us as a couple and our children. We can give our children more time than we would if we had more children, and our bond often draws comments. We can afford more sustainable foods and fuels" (Website14).*

Furthermore, elderly citizens volunteer more for the nation than other age groups. Research has shown a declining crime rate with the communities getting older. By 2050, the crime rate in Australia is expected to drop by 16 per cent as the country's population gets older. However, ageing in countries such as India and several other African countries mostly means the ageing of children

in the workforce. That is a potentially favourable demographic trend for economic growth. Thus, the coming changes in world demography could alter the distribution of global economic power over the coming decades (United Nations, Pew Research Centre, Website 15*). Thus, the issues related to demographic destiny become relevant.

Delayed Marriage: A Current Trend

In recent years, marriage patterns have changed. In light of the recent debate on the unsuitability of models of marriage patterns and family formation to a range of pre-modern historical populations, it is clear that the role played by marriage in shaping the family's life cycle is varied across time and place. It considers aspects of both female and male nuptiality and their demographic influences on the developmental life cycle of the family. A fuller understanding of the social and cultural history of the family requires an appreciation of the demographic dynamics of mortality and fertility – or birth, death and marriage – and the influence of these dynamics on family formation and development.

From a sociological perspective, a study of marriage is not only associated with fertility. It is further associated with childbearing, gender equality, and society. In other words, demographers have always been interested in nuptiality, mostly because of its possible implications for fertility. The issue of how marriage and nuptiality became so

significant should be discussed considering the following three aspects. *Firstly*, the relationship between age at marriage and age at first birth. *Secondly*, the relation between age at marriage and the children ever born to women in those age groups. *Thirdly*, there is evidence that a decline in the proportions of married couples over time has resulted in a decrease in the number of children ever born.

A recent global change in marriage and fertility practices such as cohabitation, out-of-wedlock childbearing, delayed marriages, divorce and remarriage have changed the institution of marriage as well as the concept embedded in marital status. Therefore, one's marital history can highlight mothers' and children's current and future behaviour. The entire research orbits around children's upbringing, as it is especially important to be aware of the marital history of their parents. Because more children are expected to experience the separation, divorce and remarriage of their parents and spend some time in a cohabitating or single-parent household, an examination of the marital history of the parents may prove vital in helping to explain children's current as well as future behaviour.

Because of the changing pattern in family formation, age at first marriage is becoming one of the most informative factors in the study of women's marital history. Globally, the outcome of the experiments is that the decline in the proportion of marriage by the age of 20 was one of

the two proximate determinants that influenced the decrease in fertility. Although, in the era of modernisation, it is not directly related to fertility as it had been a few decades ago. Instead, age at first union can be the significant one. For example, the United States Census Bureau (US Census Bureau/ Lugaila, 1998) reported that in 1998, about 34.7 per cent of people aged between 25 and 34 years were never married, and 53.4 per cent of Blacks in that age group were never married. At the same time, nearly 40.3 per cent of children lived with unmarried mothers and mothers who had never been married. As a result, the increase in proportions remaining single has led to the rise in out-of-wedlock childbearing. More than 30 per cent of all births occur to unmarried women (US National Centre for Health Statistics, 1997). It was also estimated that 30 per cent of all non-marital births occur within cohabiting unions (Manning & Landale, 1996).

There is also a transparent relation between *nuptiality-fertility-girls' development*. Early marriage compromises girls' development, which often results in early pregnancy and social isolation. Child marriage also provides a vicious cycle of early marriage, lower level of education, high fertility and the evil poverty cycle. Most middle and North African countries have laws on the minimum age at marriage ranging from as low as 13 years or less. Several families in these countries have been taking undue advantage of

religious laws that support early marriage and arrange for their daughters to marry in religious wedding ceremonies, postponing the official registration until the bride reaches the legal age. These evil practices leave them with no legal basis to get an inheritance, alimony, or child support if the husband dies prematurely or abandons his underage bride.

The variation in family formation and *cohabitation* development has greatly impacted the marital status classification. The practice of 'living together' without a legal marriage is widespread and is on the way to increasing worldwide. In some areas, it is a well-established practice; in other areas, it is fairly new. For example, in Bushbuckridge, a rural region of the Northern Province of South Africa, women are considered married when their male companions have paid the *labola* (traditional bride price), regardless of whether a religious or civil ceremony was observed (Garenne et al., 2000). Given the large number of these types of unions, creating a separate marital status for couples living together who are not legally married can only improve our understanding of a population's marital and family characteristics. Furthermore, important identifying information would be lost if combined with legally married couples.

Cohabitation is the term most frequently used in the United States. It specifies the sharing of a household by unmarried people with a marital relationship. The same type of union

in Canada is called a common-law union (Wu, 1999, <https://www.researchgate.net/>).

Many parts of the United States have no legal registration or definition of cohabitation.

Therefore, demographers have developed other methods to identify and measure cohabitation and its prevalence. The Census Bureau currently describes an 'unmarried partner' as a "person age 15 years and over, who is not related to the householder, who shares living quarters, and who has a close personal relationship with the householder". Before 1995, the Bureau identified any "unrelated" opposite-sex couple living with no other adults as "Persons of Opposite Sex Sharing Living Quarters". Even the US Census Bureau still reports these numbers to show demographic trends.

Bureau data reveals that in 2005, nearly 4.85 million cohabiting couples were reported, more than ten times higher than in 1960, when there were only 4,39,000 such couples. Currently, in the United States, there are approximately 4.2 million opposite-sex cohabiting households and 1.7 million same-sex cohabiting households (US Census Bureau/ Saluter and Lugaila, 1998). Historically, cohabitation in the United States was most frequent among the lower-income groups. Currently, cohabitation crosses all income levels and is found in all "adult" age groups. Statistics Canada has also documented the number of Canadians in *common-law unions* (Wickens, 1997). In 1995, nearly 2

million Canadians, representing 14 per cent of all couples, lived in *common-law unions*. Quebec has the largest number and share of cohabiting couples, constituting 64 per cent of all couples under age 30.

Over the past few decades, the age of marriage has been rising in every region for both women and men. In many developed nations, we are approaching the point where more than half of marriages occur after age 30. In social science circles, this pattern of delaying marriage is typically viewed as progress and talked about positively. However, it results in some troubling trends in coupling patterns and family stability, challenging the assumption that delayed marriage is always considered a positive action. Perhaps most importantly, the increase in the age of marriage worldwide has been associated with a rising number of children being born outside of the bonds of marriage. Moreover, couples who are not married and have a child in their 20s are three times more likely to break up before their child's fifth birthday than are married couples.

Is delaying marriage a good thing for families, or does it have a potentially harmful side effect of other sweeping changes in life courses, such as young women increasing career orientation and young men's declining earning power? As delayed marriage and the resulting delayed childbearing tend to occur in families with high educational attainment and other clear socio-economically favourable

societies, often, it is not sufficient to identify family advantages associated with delayed marriage and childbearing. There are several key arguments in favour of intentionally delaying marriage that are paradoxical. A paradox is a proposition that, despite apparently sound reasoning from acceptable premises, leads to a logically unacceptable or self-contradictory conclusion. These

"marriage-preparation paradoxes" are like turning a jar lid in the wrong direction: You may believe you are trying to loosen the lid to get what you want, but you are turning it the wrong way and making it tighter (Website16).*

They believe these actions will strengthen their future marriages. The *Book of Mormon* warns against this type of paradoxical logic, saying there will be those "that call evil good, and good evil, that put darkness for light, and light for darkness, that put bitter for sweet, and sweet for bitter" (Bible Study Tools, Tessa Emily Hall, March 24, 2023, *Website17**). Thus, due to such paradoxical logic, many young adults are intentionally delaying marriage and preparing for marriage in ways that produce the opposite of what they intend.

Globally, this question has been hotly debated whether this concept of delayed marriage meant that people had a greater say in who wanted to marry or not. There are many instances, particularly among the upper classes, in which there were complicated marriage strategies to cement family alliances, and young people were more or less forced to

marry whom their parents wished. Among the lower classes, neighbours and public authorities often helped determine whether a couple would marry—the neighbours by pressuring courting couples and officials by prohibiting unions between individuals regarded as too poor. However, historians who have focused on the middle classes assert that though couples may have received advice or even threats, they were largely free to marry whom they wished.

However, marital patterns vary according to the region where one stays, as well as their social status, class, caste, and religious affiliation (to a lesser extent). The most significant and dramatic difference is seen between the countries of north-western Europe, including the British Isles, Scandinavia, France, and Germany, and eastern and southern Europe. Historians and researchers have identified a unique marriage pattern in this continent, with couples waiting until their mid- or late twenties to marry, long beyond sexual maturity, and immediately setting up an independent household. The north-western European marriage pattern resulted largely from the idea that couples should be economically independent before marriage. Hence, both spouses spent long periods as servants or workers in other households—saving money and learning skills—or waited until their parents had died and the family property was distributed. This period of waiting has been so long. The economic requirements for marriage

set so high that many people did not marry until they were in their thirties, and many never married.

Selective Immigration

The two-year lockdown and border closures during the spread of the COVID-19 pandemic have left businesses to fill half a million job vacancies in hospitality, childcare, aged care, health, education and IT sectors in Australia. According to the Victorian Chamber of Commerce and Industry Chief Executive Officer, many jobs are unfilled. The Prime Minister has designed a special *Migration Programme for 2022-23* by providing the path to permanency. The centre-left labour government will increase Australia's permanent immigration intake from 160 thousand to 195 thousand places in the federal budget for the 2022-23 financial year. This includes 6.8 thousand workers for the technology sector, 4.7 thousand people to fill health care roles, and 6.1 thousand workers with *critical infrastructure skills*. Permanent immigration visa allocations that were once evenly split between family and skilled immigrants will now prioritise workers (Nikkei Asia, Mitch Ryan, October 18, 2022, *Website18**).

According to the UN Population Division, in 2019, there were 35 million international migrants in the Gulf Cooperation Council (GCC) countries, Jordan and Lebanon, of whom 31 per cent were women. Earlier, in 2017, the Arabian states hosted an estimated number of 23 million migrant workers, with nine million (39%) women migrant

workers significantly from Asia, with a sizeable number also coming from Africa, especially Egypt, and increasingly from East Africa (Ethiopia, Kenya, Uganda) (International Labour Organisation, *Website19**). Recently published data from British National Statistics (ONS) shows that net migration in the UK rose to an estimated record of 504 thousand from June 2022. Despite some anti-immigration messages from different sectors, the workforce remains urgently needed.

Recently, India and Australia have signed an agreement on the migration and mobility of Indian students and professionals. According to the Indian Foreign Minister, this will enable us to meet the demands of such skilled persons. Similar agreements have been signed with Germany, France, Portugal, the United Kingdom, Denmark, and other countries (Times of India, January 3, 2023, *Website20**). Like Canada, Germany, and other developed countries, Australia has also been competing globally to attract the world's best-talented, skilled immigrants, with the surge in demand exacerbated by fertility decline and an ageing population.

Germany has put the cornerstones in place to change the immigration system, make the country more attractive for skilled workers, and fill many vacancies in the labour market. It is trying to reform the existing immigration policy by introducing a so-called "*opportunity card*", which will entitle people to look for jobs in Germany

based on a point system with language skills, professional experiences and connection to Germany among the criteria (The Economic Times, October 22, 2022, *Website21**). In April 2019, Japan implemented historic immigration reform, expanding visa programmes to allow more than 345 thousand new workers to immigrate over the subsequent five years. Not-so-skilled workers can stay in Japan for five years, and high-skilled workers can stay with their families for a lifetime.

India could soon be Germany's biggest and number 1 source of talent from outside the European Union. This country is welcoming immigrants or expert Indians as there are many demands. An article in the German news portal BR24 stated that Indian immigration numbers touched a new high of 23,100 in 2021. Further, BR24, quoting the German Economic Institute, mentions that the employees from India have been a 'great success for Germany'. In a 2021 survey, it was found that 57.6 per cent of Indians who were employed worked as specialists or experts. Only 28.3 per cent of German employees are so highly qualified. Many Indians from mathematics, computer science, natural sciences and technology have been filling the gaps, as Germans accept people of all ethnicities and cultures (Times of India, January 6, 2023, *Website22**).

Another point is that Indians lead the world when settling abroad and are first in sending dollars home. With 18 million emigrants worldwide, India has the biggest diaspora. Mexico, in second place, has only 11.2

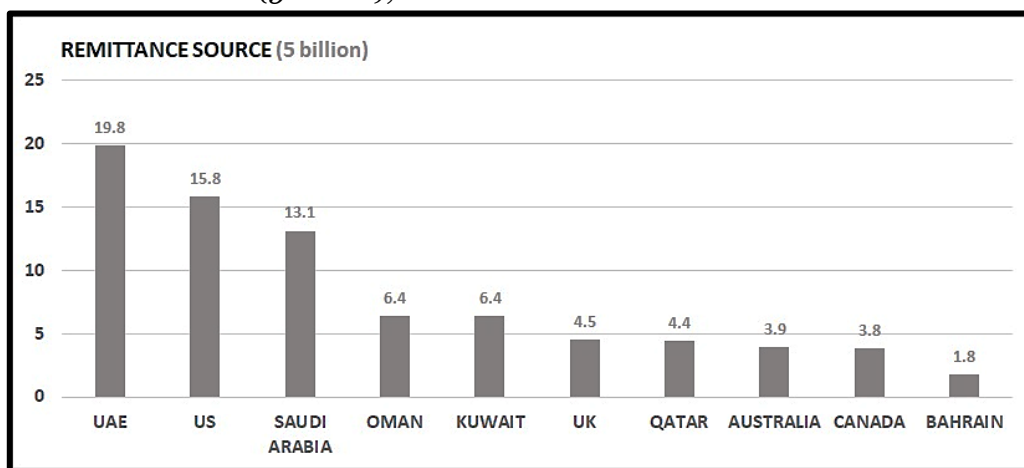
million people, followed by Russia and China, both having more than 10 million people living outside. Unlike Mexican emigrants, most of whom live in the US, Indians have spread far and wide, right from blue-collar workers in Arab countries to students in the industrialised world (*Website23**). The year 2019 brought COVID-19 and the Ukraine war, but India's emigration was not severely affected. By that time, about 0.6 million Indians had migrated to study abroad, and the largest chunk had gone to Canada, followed by the US, Australia, and the UK. In 2021, India

received \$89 billion as personal remittances from its non-resident population. A significant share of the money came from ECR countries, although they make up about 15 per cent of the emigration for work (Fig 5).

As a whole, workers who earn lower wages in their country of origin or who may expect to earn higher wages in another country for the same set of skills will be more likely to migrate (Borjas, 1999; Grogger & Hans, 2011; Torado, 1969).

Figure 5

Remittance Source (5 billion), 2021



Source: Parliament (Times of India, January 6, 2023)

Therefore, it is apparent that most migrants can be categorised as *working-age economic migrants* who are *middle-class, middle-income aspirational youths, especially white-collar job seekers* aged between 15 and 25. However, migration dynamics are highly complex and include several interdependencies. This declining and shifting world reflects some

possible scenarios for international migration and the overall redistribution of population, though they are hypothetical. The responses from governments all over the world vary a great deal. Countries like Bangladesh and India feel that the levels of both immigration and emigration are not very significant and quite acceptable. Both governments are interested in the

prospects of labour migration to the oil-rich Middle East. Pakistan and Sri Lanka experience relatively high levels of emigration but are not concerned that Sri Lanka is somewhat apprehensive about the “*brain drain*”. Some governments issue “*no objection*” certificates before going abroad, perhaps to mitigate the adverse effects of the excessive outflow of highly skilled personnel.

Does India need a population control law or drastic measures such as the two-child norm proposed by Uttar Pradesh and Assam? Should we follow China's one-child population policy? The poor community has almost reached two children. If the poor had not taken the concept of family planning seriously, fertility would not have come down, not only in India but throughout the world. If the poor are already thinking about fertility control, it means we have achieved a maximum. Thus, with the shrinking workforce, we should refrain from having any policy talking about fertility control in India at least. Rather, consider the quality of family planning services and the enhancement of education, skill, and production amongst the existing workforce, which is in a very pathetic condition.

Conventionally, women have been associated with pregnancy, childbearing, abortion, family planning and sterilisation. Women are followed in all steps. Now, we have to follow these issues differently. *The* whole world is chasing fertility control. Most strikingly, women are taken care of

only during reproductive purposes. When the babies are delivered, everybody tends to leave the programme, ignoring certain more serious issues related to women's health as well as child health.

Further, what are we doing to manage menopause? Isn't it a part of fertility or even infertility? Isn't it a part of abortion? We must focus more on these issues as well. Reproductive and Child Health, or RCH, should be followed from menarche and menopause, the very origin of the reproductive process in women's bodies.

Above all, it is not the era to offer incentives to couples all over, including India. People are addicted to the two-child family. Perhaps we need help finding a couple who are getting married this time and willing to have more than two children; let us forget about two; they will not have more than one child. For example, in Kerala, almost 20 to 30 per cent of couples have stopped with one child, even with one daughter, although there exists no one-child norm. Is this scenario celebrated today, and do we not even have TFR to two?

Emerging Population Issues

Roughly, there has been a marked association between continued enforcement of rigid gender norms and lower fertility. Several countries like South Korea and Japan have very strongly severe social sanctions against single mothers and some of the lowest birth rates in the world, at an estimated 1.4 and 0.9 children per woman, respectively. Germany used to have a very patriarchal welfare

state and paid for it in the form of a low birth rate, too, though it seems to have made some progress in this area recently. By contrast, Sweden and France have kept their fertility rate comparatively high (1.7 & 1.8) by embracing gender equality and generous welfare benefits — especially for single parents, as it is harder to raise a child solely (Ryan Cooper, National Correspondent, November 29, 2021, *Website24**).

The immediate task for the world is to save more and more children at birth and ensure that they grow into healthy and educated adults. Considering India aims to become a \$5 trillion economy by 2025, even if this happens, the estimated per-capita GDP rank would still be around 135 out of 190 economies. The harsh reality is that, among the Asian economies, India's per-capita GDP is lower than some of the neighbouring countries. It must transform from an emerging to a developed economy, or it may be in a middle-income trap. Therefore, a nation needs to raise incomes, which requires job creation. Especially for the countries where, on the one hand, "growth is jobless", and on the other hand, there is a lack of structural change with the share of the workforce in agriculture increasing. This does not bode well for the country's demographic dividend. With the sympathetically unbalanced wealth distribution, the top one per cent of people in India hold 33 per cent, and the top 10 per cent holds 64.6 per cent of the country's wealth (World Inequality Report, 2022).

Income needs to be inclusive, or else India will grow rich without Indians getting rich. Furthermore, with a median age of 28.3 (considering 15-29 years as youth) and a potential decline of the working-age population, the median age may rise to 30.2 by 2026 and 34.5 by 2036. Such a trend will affect the economy and the society.

The 'East-Asian miracle' was based on demographic dividend. Almost all East-Asian countries' investment policies in education, public health, productive employment and structural transformation contributed towards higher economic growth. China's GDP growth between the early 1990s and 2000s was mostly in double digits or close to it. However, the demographic dividend of China has now started petering out. While India's growth rate is catching up with the economic slowdown in China, reaching double-digits will require sound macroeconomic fundamentals and reaping the demographic dividend to the fullest. India must ensure human development. Nevertheless, with 131 HDI rank, the demography cannot prosper.

Another major issue is depopulation in one form or another. Fertility, mortality, out-migration, selective migration, ageing, and their combinations have contributed to this process, which has become almost endemic. Localities, villages, cities, regions and nations suffer from depopulation. Ninety small cities and counties on the verge of extinction due to remarkable population decline have been designated as "*depopulation areas*". Governments

plan to provide intensive administrative and financial support to help the concerned areas escape their extinction crisis. South Korea has been struggling with a steady decline in childbirths and the overcrowded capital region, which have left many non-capital regions struggling to overcome depopulation.

Interestingly, the designation of depopulation areas came after the *Special Act on Balanced National Development* was revised late last year, and its enforcement decree was amended in June (The Korea Times, October 18, 2021, *Website25**). The designation of depopulation areas is a new starting point for the government's efforts to solve the problem of population decline. With this process becoming rampant, governments and planning authorities will be forced to take similar measures. Nonetheless, how will different governments define the depopulated areas? Will the reduction of population be the only criterion? A depopulated nucleus may become a *depopulated region* over time, derailing social and economic setup.

Conclusion

By 2050, the world population will be widely different. In East Asia and South and East Europe, the population will decrease. In contrast, in Africa, the population will have grown immensely. These three regions will experience the greatest population change from a social and economic perspective. Population decline will weaken the construction industries in Europe and East Asia. With fewer consumers, business in general will also have decreased. Likewise, with fewer commuters,

public transport will be more expensive. Having fewer kids, schools will have a lesser number of students. Already, in some countries, schools are being converted to old-age homes. Furthermore, social security programmes will need more money with more older people and fewer young people to support them. Lastly, with fewer people producing and consuming goods, Europe and East Asia will have slow or negative economic growth.

Considering the above scenario, there is also a positive side. Young people will have more job opportunities, and there will be decreased environmental degradation. On the other hand, African population growth will have different connotations. With more people producing and consuming products, the continent will experience rapid economic growth. Businesses will also have more demand and, hence, will be able to expand.

On the other hand, with more young people, there will be more social problems. Unfortunately, there will be more unemployment and fewer job opportunities for the young. Future diseases, especially climate change, will also be a serious threat, affecting crop yields. Lastly, African environmental impacts will be worsened. All the projections are being made based on current trends and models.

Future events will change the world population to a large extent, which one cannot entirely foresee; for example, the coronavirus has decreased short-term population growth worldwide. However, for most of the part, the projections were

accurate. We need to rethink and replan production and consumption, recycle wastes to a reusable one, switch to clean energy and innovative technology, and improve education, which ultimately can help to reduce the unsustainable growth of population along with an imbalanced man-land ratio and bring a long-term benefit to every country in the world. All of us can play a role in safeguarding the planet's future.

References

- Agarwala, S. N. (1977). *India's population problems* (2nd ed). Tata McGraw-Hill.
<https://cir.nii.ac.jp/crid/1130000794759457664.bib?lang=en>
- Borjas, G. J. (1999). Chapter 28 - The Economic Analysis of Immigration. In O. C. Ashenfelter & D. Card (Eds.), *Handbook of Labor Economics* (Vol. 3, pp. 1697–1760). Elsevier.
[https://doi.org/https://doi.org/10.1016/S1573-4463\(99\)03009-6](https://doi.org/https://doi.org/10.1016/S1573-4463(99)03009-6)
- Borjas, G. J. (2003). The Labor Demand Curve is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market*. *The Quarterly Journal of Economics*, 118(4), 1335–1374.
<https://doi.org/10.1162/003355303322552810>
- Borjas, G. J., & Katz, L. F. (2007). The evolution of the Mexican-born workforce in the United States. *Mexican Immigration to the United States*, 13–56.
- Clarke, J. (1997). *The Future of Population*. Phoenix.
- Elahi, K. M., & Kosiński, Leszek. (1985). Population redistribution and development in South Asia. *Population and Development Review*, 12, 598.
<https://api.semanticscholar.org/CorpusID:129019593>
- Fuller, G. A., & Clarke, J. (1984). Population geography and family planning. *Geography and Population*, 103–109.
- Garenne, M., Tollman, S., & Kahn, K. (2000). Premarital Fertility in Rural South Africa: A Challenge to Existing Population Policy. *Studies in Family Planning*, 31(1), 47–54.
<https://doi.org/https://doi.org/10.1111/j.1728-4465.2000.00047.x>
- Grogger, J., & Hanson, G. H. (2011). Income maximisation and the selection and sorting of international migrants. *Journal of Development Economics*, 95(1), 42–57.
<https://doi.org/https://doi.org/10.1016/j.jdeveco.2010.06.003>
- International Organisation for Migration. (2020). *World Migration Report*.
- Kalam, A. P. J. A. (2010). *The scientific Indian: A twenty-first century guide to the world around us*. Penguin UK.
- Lawton, R. (1968). Population Changes in England and Wales in the Later Nineteenth Century: An Analysis of Trends by Registration Districts. *Transactions of the Institute of British Geographers*, 44, 55–74.
<https://doi.org/10.2307/621748>
- Lugaila, T. A. (1998). Marital Status and Living Arrangements: March 1998 (Update). Current Population Reports. *Washington, DC: US Bureau of the Census*.
- Manning, W. D., & Landale, N. S. (1996). Racial and Ethnic Differences in the Role of Cohabitation in Premarital Childbearing. *Journal of Marriage and Family*, 58(1), 63–77.
<https://doi.org/10.2307/353377>

- Morgan, S. P. (2003). Is low fertility a twenty-first-century demographic crisis? *Demography*, 40(4), 589–603. <https://doi.org/10.1353/dem.2003.0037>
- Nag, P. (1989). Contributions of the IGU and ICA commissions in population studies. *Population Geography: A Journal of the Association of Population Geographers of India*, 11(1–2), 86–96.
- National Centre for Health Statistics (US). (1997). Access to health care. Part 1: Children. In *Vital and Health Statistics. Series 10, Data from the National Health Survey* (Issue 196).
- Rosen, G. (1959). *Population Growth and Economic Development in Low-Income Countries*. JSTOR.
- Saluter, A. F. (1988). *Marital Status and Living Arrangements: March 1987* (Issue 423). US Department of Commerce, Bureau of the Census.
- Siddhisena, K. A. P. (2005). Socio-economic implications of ageing in Sri Lanka: an overview. *Oxford Institute of Ageing Working Papers. Oxford: Oxford Institute of Ageing*, 1, 27.
- Srikantan, K. S. (1969). Family planning and fertility control in India. *Proceedings of the International Population Conference*, 138-148.
- Todaro, M. P. (1969). A model of labor migration and urban unemployment in less developed countries. *The American Economic Review*, 59(1), 138–148.
- Wickens, C. D., & Seidler, K. S. (1997). Information access in a dual-task context: Testing a model of optimal strategy selection. *Journal of Experimental Psychology: Applied*, 3(3), 196.
- Website1: <https://timesofindia.indiatimes.com/blogs/toi-edit-page/problem-solution-problem-indias-population-will-start-to-collapse-in-two-decades-its-a-matter-of-celebration-and-concern/?source=app&frmapp=yes>
- Website2: <https://www.dawn.com/news/1731882>
- Website3: <https://www.thehindu.com/opinion/editorial/aging-factory-the-hindu-editorial-on-chinas-population-decline/article66409096.ece>
- Website4: <https://www.theguardian.com/world/2023/jan/20/the-last-generation-young-chinese-people-vow-not-to-have-children>
- Website5: <https://www.msn.com/en-in/news/other/why-india-s-population-problem-is-not-what-youthink/arAAVdrMt#:~:text=Two%20percent%20studies%20estimate%20the,roughly%20half%20of%20today's%20population.>
- Website6: <https://vajiramias.com/current-affairs/population-of-indias-religious-groups/614ab3861d5def05eb9656565/>
- Website 7: <https://www.euronews.com/2022/01/14/croatia-s-population-has-dropped-10-in-a-decade-reveals-census>
- Website8: https://www.business-standard.com/article/international/s-korea-s-population-to-see-1st-decline-amid-low-birthrate-rapid-aging-121120900321_1.html
- Website9: <https://www.census.gov/newsroom/press-releases/2021/2021-population-estimates.html>

Website10:

<https://www.theguardian.com/australia-news/2023/jan/02/australias-fertility-rate-rebounds-to-pre-covid-levels-but-jim-chalmers-issues-warning-on-aging-population>

Website11:

<https://www.msn.com/en-in/news/other/why-india-s-population-problem-is-not-what-you-think/ar-AAVdrMt>

Website12:

<https://www.pewresearch.org/global/2014/01/30/attitudes-about-aging-a-global-perspective/#:~:text=At%20a%20time%20when%20the,a%20Pew%20Research%20Center%20survey.>

Website13:

<https://www.scmp.com/economy/china-economy/article/3163841/chinas-population-nears-normalised-phase-decline-experts>

Website14:

<https://populationmatters.org/choosing-a-small-family-3/>

Website15:

<https://www.pewresearch.org/global/2014/01/30/attitudes-about-aging-a-global-perspective/>

Website16:

<https://www.churchofjesuschrist.org/study/ensign/2017/03/young-adults/delaying-marriage-the-trends-and-the-consequences?lang=eng>

Website 17:

<https://www.biblestudytools.com/>

Website18:

<https://asia.nikkei.com/Spotlight/Asia-Insight/Fortress-Australia-seeks-to-become-immigration-nation-again>

Website 19:

<https://www.ilo.org/global/lang-en/index.htm>

Website20:

<https://www.y-axis.com/news/australia-and-india-signed-framework-for-easy-immigration-paths-for-professionals-students-apply-now/#:~:text=India>

Website21:

<https://economictimes.indiatimes.com/archive/year-2022,month-10.cms>

Website22:

<https://timesofindia.indiatimes.com/archive/year-2023,month-1.cms>

Website23:

<https://economictimes.indiatimes.com/nri/migrate/at-18-million-india-has-the-worlds-largest-diaspora-population/articleshow/80290768.cms>

Website 24:

<https://news.yahoo.com/america-looking-down-barrel-population-105514944.html>

Website25:

https://www.koreatimes.co.kr/www/culture/2023/07/135_317180.html

Authors

Dr. Amrita Paul

Assistant Professor and Head
Department of Geography
Belda College, Belda, West Midnapore,
West Bengal
Email: amrita.tanny@gmail.com

Dr. Prithvish Nag

Former Vice Chancellor, Mahatma Gandhi
Kashi Vidyapeeth, Varanasi
Email: prithvishnag@hotmail.com